

ALBERTA NEWSLETTER

INDUSTRIAL DEVELOPMENT BOARD OF THE PROVINCE OF ALBERTA
DEPARTMENT OF ECONOMIC AFFAIRS, EDMONTON, ALBERTA CANADA



HON. A. J. HOOKE, Minister

RALPH R. MOORE, Deputy Minister

VOL. 1—No. 14

RICHARD MARTLAND, Director

MARCH 1954

ALBERTA MEAT PACKING INDUSTRY

Meat packing is a very important Alberta industry, producing \$86,370,151 worth of meat products a year. Its production is not surpassed in value by any of the other segments of the Alberta vegetable and animal products industry.

In 1953, Alberta's 15 meat packing plants employed 3,799 persons at an annual payroll of more than \$9,000,000. Distributed between the cities of Edmonton and Calgary, the packing plants' output includes beef, mutton, lamb, pork, veal, poultry, sausages, cooked and canned meats, mince-meat, lard, shortening, tallow, vegetable and other oils, stock and poultry foods, hides, hair and fertilizer.

Burns and Co. Limited, whose head office and main plant is in Calgary, and a branch plant at Edmonton, is the pioneer of the Alberta meat packing industry. The foundation of this company was laid by the slaughterhouse which the company's founder, Senator Patrick Burns, established at Calgary in 1891. Other companies operating in Alberta include Canada Packers Ltd., whose main plant is at Edmonton, Swift Canadian Co. Limited with plants at Calgary and Edmonton, and Gainers Ltd., also of Edmonton and Calgary. These companies market their products in British Columbia, Quebec and Saskatchewan as well as the immediate Alberta market.

Alberta's meat packing industry made substantial contributions to the successful conduct of two

world wars. Canned meats and dehydrated eggs, such as those produced at the Burns and Co. plant, were supplied in enormous quantities to the Allied armed services and at the peak of the Second Great War, Alberta meat production attained 500,000,000 pounds a year.

Basis of the meat-packing business is the Alberta livestock industry, which during 1953 had a value of production of \$156,358,510. In 1952, the number of cattle on Alberta farms was estimated at 1,754,000 while there were 387,000 sheep and lambs and 1,170,000 swine. During 1953, 471,634 cattle were marketed, 113,676 calves, 112,523 sheep and lambs, and 1,432,438 swine.

Under normal range conditions, much of the surplus cattle is marketed in the fall. Cattle that have pastured well during the summer, are ready for immediate butchering and produce the highest grades of meat. Cattle too thin for immediate slaughter are placed on feed lots by commercial feeders, and sold for slaughter when well finished.

Other industries related to livestock produce leather goods and animal foods. The leather products industry is small, totalling 12 businesses with a total 1952 production of \$300,000, but has a steady market for its products in western Canada. Four tanneries produce harness leather and tan hides while miscellaneous leather goods are made by eight other firms. Among their products are harnesses, stock saddles, riding equipment, dog collars, sporting goods, briefcases and general luggage and hand-tooled belts.

The animal foods industry consists of two plants, whose output is used for feeding household pets and ranch-raised fur animals. Products from both plants are sold in other western provinces as well as Alberta.

The purpose of the ALBERTA NEWSLETTER is to provide up-to-date information about development and opportunities in Alberta.

In this issue—

- C.I.L. Explosives Plant
- Survey of Fort Saskatchewan
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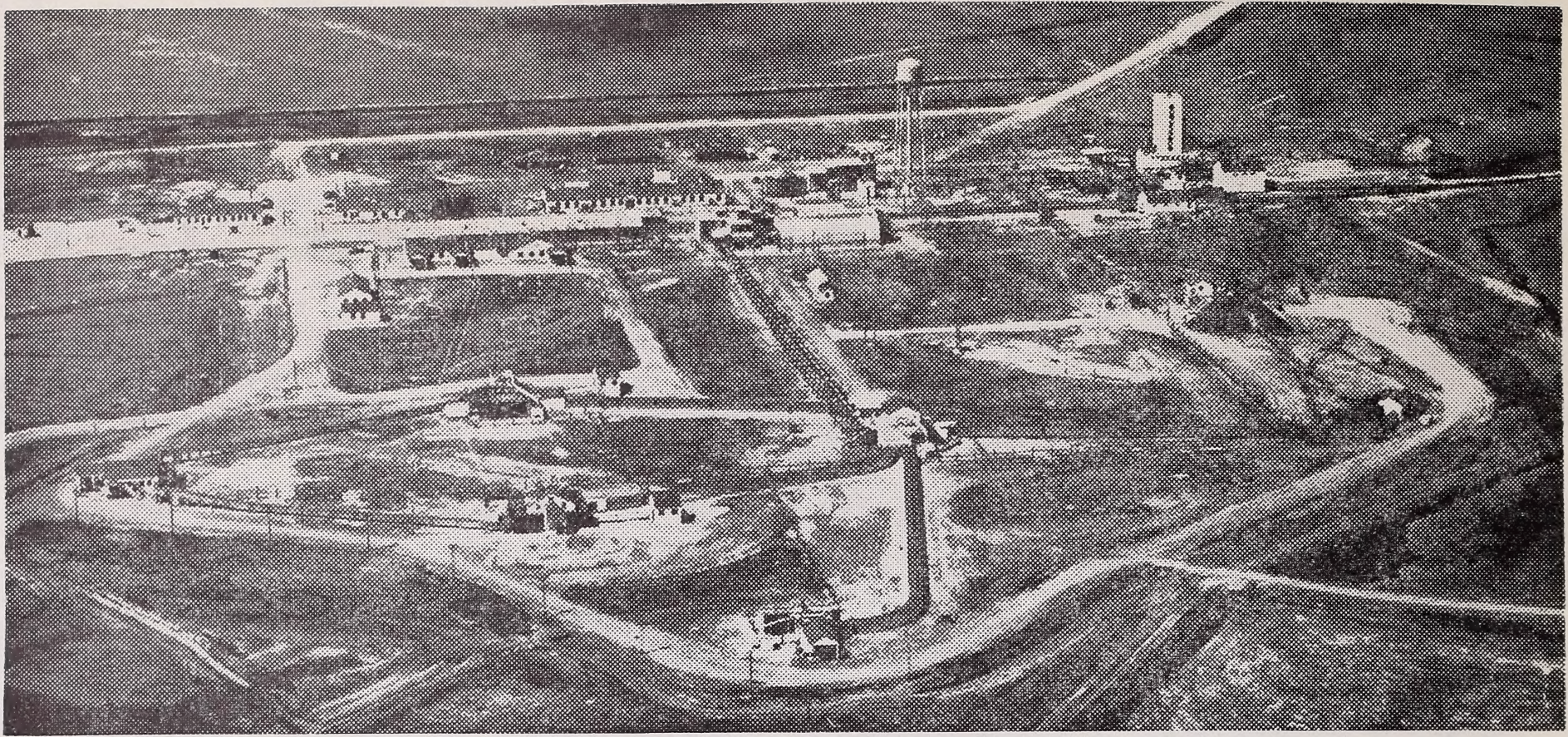


Photo by Lorne Burkell, Calgary

Cut through courtesy of The Calgary Herald

Alberta Industries . . .

C.I.L.'S CALGARY EXPLOSIVES PLANT

The development of the petroleum industry in Alberta has been responsible for the establishment of numerous allied industries to supply tools, equipment and services for the oil trade. One of the most important of these is the Canadian Industries Limited explosives plant, located nine miles south-east of Calgary, and two miles south of Ogden.

Although explosives are supplied to the construction, coal mining and hard rock mining industries, the larger volume of business goes to the oil industry. Situated at a strategic location near Calgary, the plant is within a relatively short shipping distance from the oil fields at Leduc, Redwater, Pembina and Turner Valley, as well as being in an excellent position to supply explosives for exploratory work in Saskatchewan, northern Alberta, Yukon and Northwest Territories.

The choice of Calgary for a location also is ideal because of the availability of large supplies of ammonia from the Consolidated Mining and Smelting Company's fertilizer plant in the city. Ammonia is a vital ingredient in the preparation of nitric acid as the first step in explosives manufacturing. Calgary also has a plentiful supply of natural gas, electricity, and water—all of which are required by the plant.

Constructed at a cost of \$4,000,000, the C.I.L. plant began production in August, 1952, and now manufactures explosives for oil prospecting, seismograph work, perforating oil wells, and for industries outside the oil trade. The plant contains some of the most modern equipment on the continent, with about 75 percent of the processes being automatic.

Production is divided into three main sections—

the manufacture of nitric acid, the preparation of nitro-glycerine, and the manufacture of the high explosives. The plant consists of several widely-separated buildings on the 1,300-acre site, each housing a certain phase of the operations.

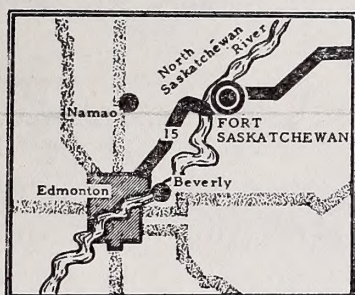
The nitric acid is manufactured by oxidizing air with ammonia and from there it is shipped to the Biazzi unit where the nitric acid is mixed with the glycerine to make the highly explosive nitro-glycerine. The C.I.L. plant was the first on the continent to use the Biazzi process of continuous nitration in these phases of the work. The Swiss system has proven to be superior to any other present methods used in explosives manufacturing.

The heat generated during the Biazzi nitration process is removed by a huge 50-ton refrigeration plant and, in case the generation of heat reaches a certain danger point, there is automatic equipment which will render the mixture harmless.

When the process is completed, the nitro-glycerine is similar in appearance to light oil. It then is mixed with various pulps, such as ground corn cobs, brewers' flakes, and almond shells, and is packed into cardboard cartridge cases. Upon completion of this process, only the percussion cap needs to be added to complete the explosive.

The explosives are boxed and moved by an enclosed conveyor belt to the lid nailing house. The product is then ready for shipment to any part of western Canada.

As would be expected in the manufacture of high explosives, safety regulations play an important part in the life of the 150 workers. A continuous program for educating employees in safety measures through films, lectures, posters, and safety contests is carried out.



FORT SASKATCHEWAN

LOCATION: On the south bank of the North Saskatchewan River, 19 miles east of Edmonton. On Highway No. 15 and the Edmonton-Winnipeg line of the Canadian National Railways.

POPULATION: 1,650.

ALTITUDE: 2,051 feet.

TEMPERATURE: Mean summer, 55.8 degrees; mean winter, 22.8 degrees; mean yearly, 36.3.

RAINFALL: Average annual rainfall, 13.18; average annual snowfall, 50.10; average annual total precipitation, 18.19.

GEOLOGY: The bedrock of this area, underlying the glacial deposits is the Belly River formation of the Upper Cretaceous period. This formation is a series of light-colored sandstone and shales. This horizon, as in other parts of the Province, includes dinosaur beds and coal seams.

SOIL: Fort Saskatchewan is in the black to very dark brown soil area, which averages about 12 to 14 inches in depth. Below this black soil is a more compact horizon which is brown to dark brown, and the lime layer is found usually at 30 to 40 inches below the surface.

Soils in this zone are the most fertile in the Province. They have in the top 12 inches about three to four times as much nitrogen and organic matter as there is in the average brown or gray wooded soil. A high percentage of the land is arable, with wheat and cereal grains the main crops. A high percentage of the zone is arable. Wheat of fairly good quality is grown but mixed farming is more secure and profitable.

HISTORY: Fort Augustus, a North West Company trading post, was built on the north bank of the North Saskatchewan River, about half a mile east of the present town, in 1794. In 1874, the North West Mounted Police established a post which remained until 1911, when it was taken over by the Alberta Government to form the site of the Fort Saskatchewan provincial jail.

Fort Saskatchewan became a village March 1, 1899 and was incorporated as a town July 1, 1904. The Canadian Northern Railway reached the town in the summer of 1905.

Natural gas began to be supplied to the town by Northwest Utilities Ltd. on October 1, 1950. A central water and sewerage system was installed in 1951 and is being extended.

In the spring of 1952, Sherritt Gordon Mines Limited began construction of a \$17,500,000 nickel refinery on an 860-acre site east of the town. The project will be completed in the spring of 1954.

LIVING CONDITIONS: The land around the town is slightly rolling prairie, with bluffs of poplar and willow brush. The town has many trees as well as the landscaped grounds of the provincial jail and a small park with bandstand. More than 80 percent of the population is from eastern Canada, the United States and Great Britain. There are excellent camping sites along the banks of the North Saskatchewan and Sturgeon Rivers, which provide good fishing for pike and pickerel. Sports facilities include a community hall for badminton, exhibition grounds, tennis courts, an open air skating rink, and a covered curling rink with four sheets of natural ice. There is good hunting for Hungarian partridge, ducks and geese.

ADMINISTRATION: The town is governed by a mayor and six councillors. The mayor is elected for a two-year term, and two councillors are elected yearly for three-year terms. A secretary-treasurer administers the town's affairs.

LAWS AND REGULATIONS: There is one town constable and one night watchman, and on Saturday evenings, there are five special constables on duty. There are two justices of the peace, a visiting magistrate from Vegreville, and the wardens and guards from the Provincial Jail. There is a building by-law and plans for all new buildings and major alterations must be approved by the Interim Development Board. Electrical and sanitary installations must comply with the provincial regulations while gas installations must comply with the town's gas by-law.

FIRE PROTECTION: A 20-man volunteer fire brigade, 16 fire hydrants, a crash truck and a chemical and pumper truck.

TAX STRUCTURE: Recent property assessment in Fort Saskatchewan places the net total at \$731,-303, made up of land at \$181,755, and improvements at \$513,638. The present tax rate is 40 mills.

POWER: Three phase 60 cycle power is supplied by Calgary Power Limited. The minimum charge is \$2.70 a month for 20 kwh, with a 30-cent discount for early payment and 1.5 cents for all kwhs. over 20. Commercial rates are ten cents per kilowatt for the first 50 kwhs., five cents for the next 150, and 2.25 cents for all over 200 kwhs. Minimum gross is \$1.80 a month.

WATER: Water, obtained from two 60-foot deep wells, is pumped directly into the mains and the 80,000-gallon water tower serving the jail. Family house rate is \$3.75 a month, two-family rate, \$6.25 per month, and hotels and businesses on a meter rate based on \$2.50 for the first 1,500 gallons and \$1 for multiples of this basic consumption.

FUEL: Natural gas is supplied from the Viking-Kinsella field by Northwestern Utilities Ltd. Domestic rate is \$2.50 per month for the first three mcf., and 38 cents per mcf per month for all additional mcf. Commercial and industrial rates are available to those using more than 741 mcfs. per year. Local sources of propane and diesel fuel are available with propane storage capacity of 500 gallons and a diesel fuel storage capacity of 17,000 gallons. Coal, of around 8,400 B.T.U.s per pound heat value, can be brought from Namao, 12 miles west of the town.

RESOURCES: Wheat and coarse grains, straw, horses, cattle, sheep, hogs, dairy and poultry products, honey, natural gas, crude oil, clay, sand and gravel.

HEALTH SERVICES: Two doctors, two drug stores, two veterinarians, one dentist and the Leduc-Strathcona Health Unit which visits the town once a month.

TRANSPORTATION: Canadian National Railways, Greyhound Bus Lines, and one taxi stand with two cabs. There is an excellent road to Edmonton, and Shackleton's Transport provides trucking service.

COMMUNICATIONS: Alberta Government Telephones, Canadian National Telegraphs, a post office and The Fort Saskatchewan Record, a weekly newspaper.

FINANCIAL FACILITIES: Canadian Bank of Commerce and Royal Bank of Canada.

HOTELS AND TOURIST CABINS: Two hotels, the Fort and the Brant, operate at Fort Saskatchewan; both have licensed premises, and 25 rooms. Rates are \$1.50 and up at the Fort and \$2.50 and up at the Brant. A trailer camp charges 75 cents a night for small trailers and \$1.25 a night for larger trailers.

LODGES AND SERVICE CLUBS: Masons, I.O.O.F., Rebeccas, Lions, Canadian Legion, Chamber of Commerce, Ratepayers Association, Handicraft Guild, Women's Institute, Home and School Association.

EDUCATION: Grades 1-12 are taught within the town. A new eight-room elementary school is nearing completion.

CHURCHES: Anglican, Roman Catholic and United.

THEATRES AND HALLS: The Lux Theatre, Community Hall and Union Hall, the latter two equipped with pianos.

CULTURAL ACTIVITIES: There is a 50-piece high school band and high school students are taught music appreciation. Miss Gillis, a local teacher, has organized a library in the community hall.

SPORTS: Baseball, hockey, softball, tennis, curling, and trap shooting.

INDUSTRIAL DEVELOPMENT: Fort Saskatchewan has a great industrial future. Located close to rich fields of natural gas and near the large industrial city of Edmonton, the town's growth should be impressive. Secondary industries likely will be established in the area, following completion of the large nickel refinery of Sherritt-Gordon Mines Limited. This refinery will produce annually 17,000,000 pounds of refined nickel, 15,000 tons of copper sulphide, 300,000 pounds of refined cobalt and 70,000 tons of ammonium sulphate fertilizer, a valuable by-product.

FOR FURTHER INFORMATION ON
FORT SASKATCHEWAN, WRITE:

Secretary-Treasurer,
Town of Fort Saskatchewan,

or

Director of Industrial Development,
Legislative Buildings,
Edmonton.